SONY

3-754-673-**22**(1)

Compact Hi-Fi Stereo System

Operating Instructions

LBT-D107R

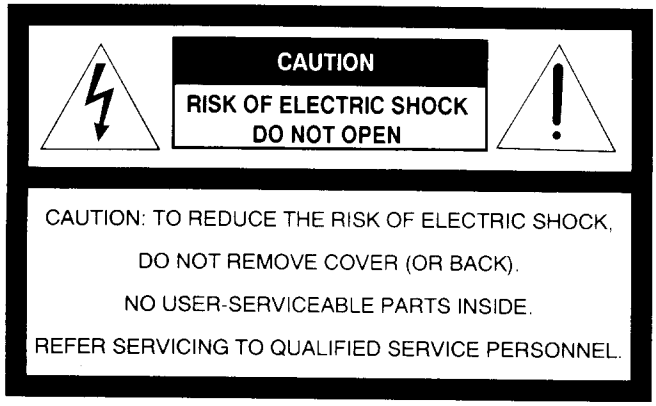
© 1991 by Sony Corporation

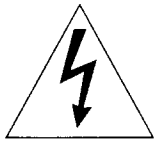
Warning

Owner's Record
The model and serial numbers are located at the rear. Record these numbers in the space provided below. Refer to these numbers where you call upon your Sony dealer regarding this product.

Model No. LBT-D107R Serial No. _____

To prevent fire or shock hazard, do not expose the unit to rain or moisture.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of import operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Note to CATV system installer:
This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

INFORMATION
This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device on accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Relocate the receiving antenna
Relocate the equipment with respect to the receiver
Move the equipment away from the receiver
Plug the equipment into a different outlet so that equipment and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful:
"How to Identify and Resolve Radio-TV Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington, DC 20402, Stock No. 004-000-00345-4.

Configuration

This manual covers the system in the chart below.
The system number is shown on the carton box.

System number / Component	LBT-D107R
Stereo deck receiver	HST-D107R
Speakers	SS-D117
CD player	CDP-C322M

• For the instructions of CDP-C322M, please refer to the operating instructions supplied with it.

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Precautions

Before operating the system, read the following precautions carefully.

- Operate the unit only on 120 V AC, 60 Hz.
- Unplug the system from the wall outlet if it is not to be used for an extended period of time. To disconnect the cord, pull it out by grasping the plug. Never pull the cord itself.
- Should any solid object or liquid fall into a unit, unplug the unit and have it checked by qualified personnel before any further operation.
- The nameplate indicating operation voltage, power consumption, etc. is located at the rear.
- The AC power cord must be changed only at a qualified service shop.

If you have any questions or problems concerning your system, please consult your nearest Sony dealer.

For detailed precautions, see the leaflet "IMPORTANT SAFEGUARDS".

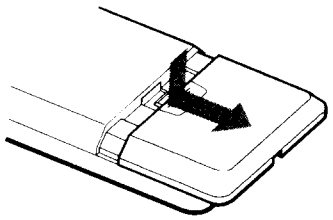
Preparations

You can control the system with the supplied remote commander.

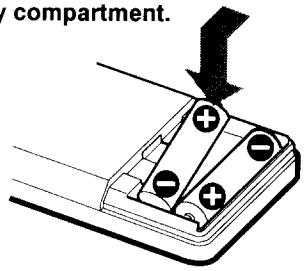
Remote Commander

Insert two size AA (R6) batteries with the correct polarity.

1 **Slide the cover in the direction of the arrow to remove it.**



2 **Insert two size AA (R6) batteries correctly so that the + and - polarities match the polarity diagrams inside the battery compartment.**



Battery life

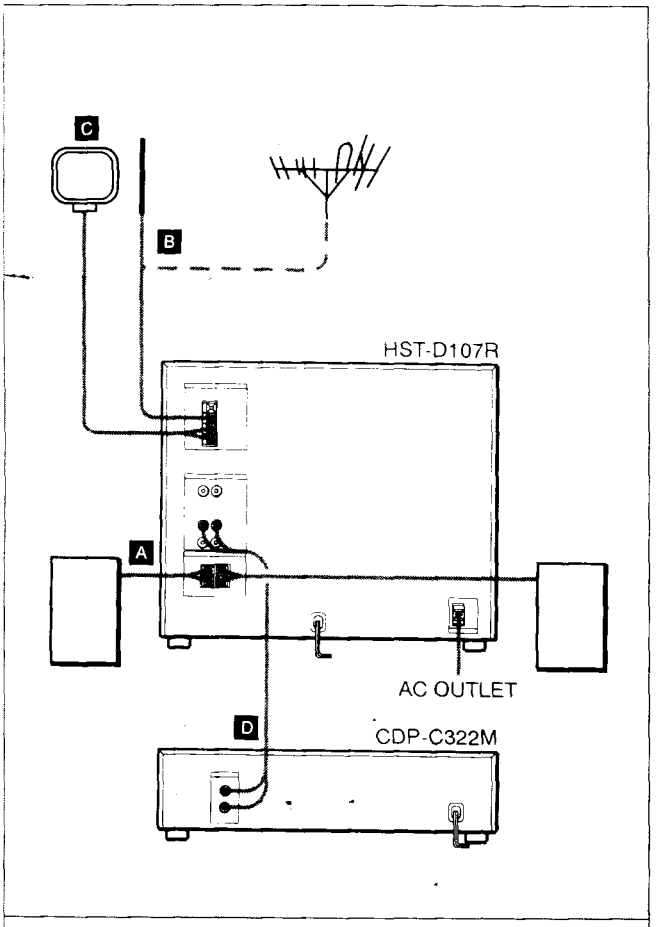
About half a year of normal operation can be expected when using Sony SUM-3 (NS) batteries.
When the batteries are exhausted, the commander can no longer operate the system Replace both batteries with new ones.

To avoid battery leakage

When the commander is not to be-used for a long period of time, remove the batteries to avoid damage caused by battery leakage and corrosion.
To avoid malfunction of the remote commander, avoid keeping the commander in extremely hot or humid locations.

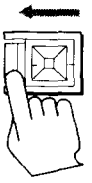
Connections

Turn all the power off before making any connections
The diagram below shows the system connection.
The letters in the diagram correspond to those in the text.

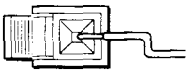


How to attach a wire to the terminal

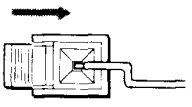
1 Press down on the button.



2 Insert the wire.



3 Push up the button.

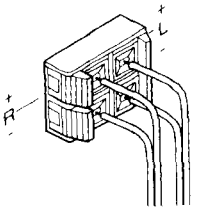


Notes on Connections

- Connect the AC power cord last.
- Cord plugs and jacks are color coded.
  Red plugs and jacks are for the right channel (R) and white ones are for the left channel (L).

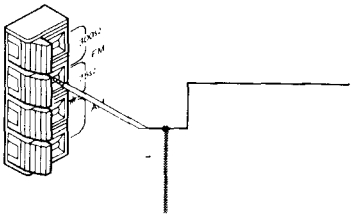
Speaker Cord Connections A

1 Strip 15 mm of the speaker cord coating from the end of the cord.
2 Connect the right speaker to the R (right) speaker terminal, and the left speaker to the L (left) speaker terminal.



FM Antenna Connection B

Connect the supplied FM wire antenna to the FM 75 Ω terminal and extend horizontally.

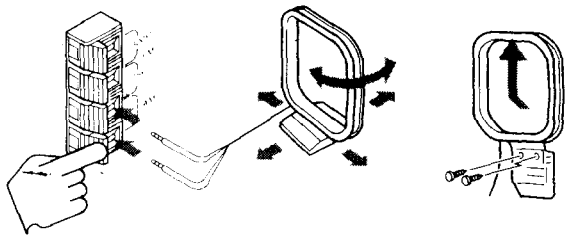


Supplied wire antenna

For better reception
Connect to an outdoor antenna.

AM Antenna Connection C

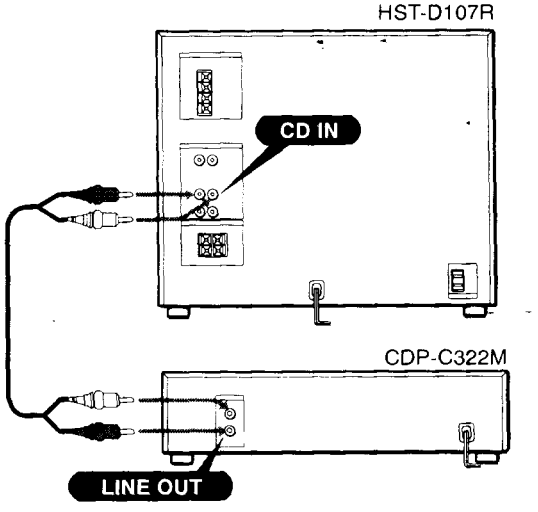
Connect the supplied loop antenna to the AM and ⏚ terminals.
You can attach the loop antenna on the wall using the commercially available screws.



For better reception
Connect an insulated wire of 6 to 15 meters (20- to 50-feet) to the AM terminal.

CD Player D

Connect the CD player to the HST-D107R stereo deck receiver with a connecting cord. To listen to compact discs, press the CD button.



Adding Another Component to the System

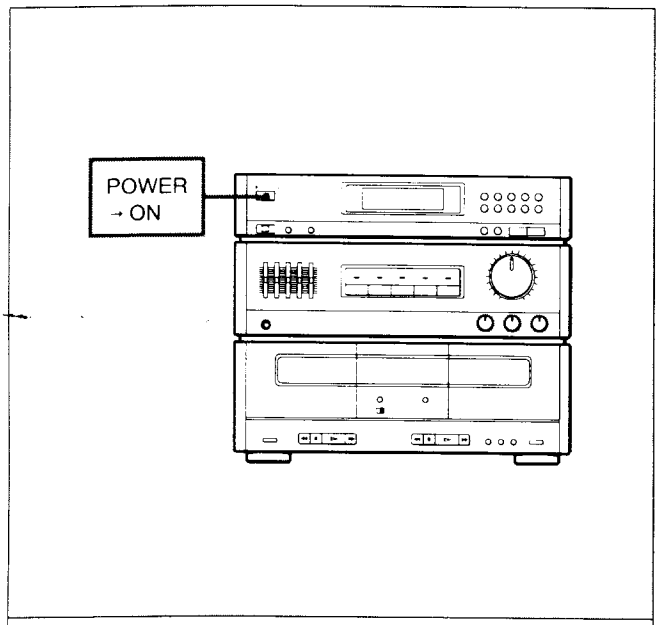
You can connect a turntable and a VCR to the PHONO and to VIDEO jacks respectively.
To select the turntable, press the PHONO button.
To select the VCR, press the VIDEO button.

AC Power Cord

Connect the AC power cord of the CD player or another component (the power consumption of which must be less than 100 W) to the supplied AC OUTLET on the rear of HST-D107R, and then the AC power cord of the HST-D107R to a wall outlet.

Turning on the Power

Turn on the power after completing all connections.



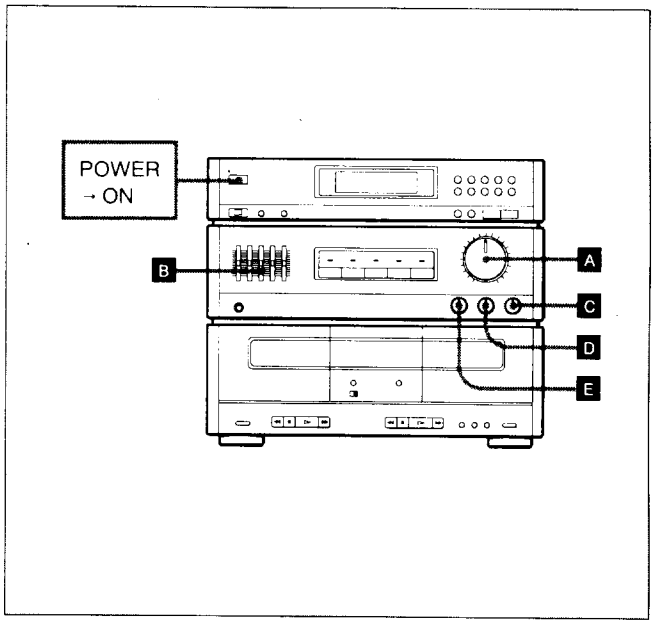
Turn on the stereo deck receiver.

Note on the connected CD player

Turn off the CD player when you listen to the tuner; otherwise, you may hear noise while receiving radio broadcast.

Basic Sound Adjustments

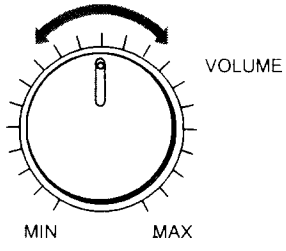
The following operations apply only to reproduced sound. The letters in the illustration below correspond to those in the text.



Adjusting the Volume A

To increase the volume, turn the VOLUME control clockwise. To decrease it, turn the control counterclockwise.

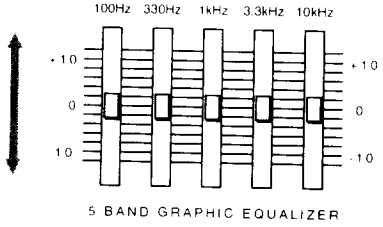
- Turn down the volume before switching on the unit. This prevents damage to speakers.



Adjusting the Sound Quality B

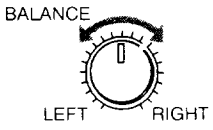
Adjust the following 5 BAND GRAPHIC EQUALIZER controls.

100 Hz: Boosts or cuts heavy bass.
330 Hz: Adjusts the power, spaciousness and warmth of the sound.
1 kHz: Accentuates or dims vocals.
3.3 kHz: Boosts to a brighter sound or reduces stridency.
10 kHz: Adjusts tape hiss noise.



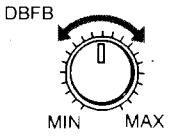
Adjusting the Balance C

When the position of the speakers is not symmetrical, the relative strength of the right and left speaker outputs will be unbalanced.
Adjust the balance with the BALANCE control.



Reinforcing the Bass D

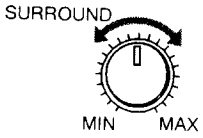
Adjust the DBFB control.



Enjoying the Surround Effect E

Adjust the SURROUND control.

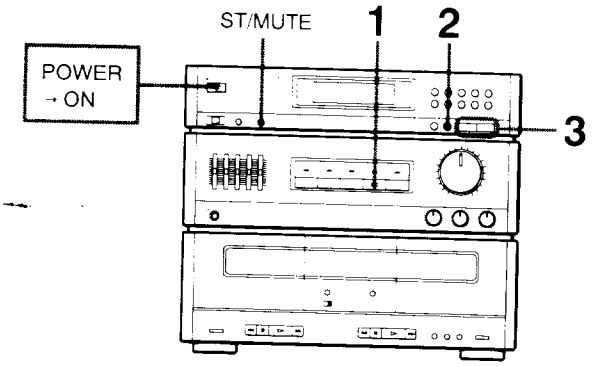
- The surround effect does not function when the sound source is monaural.



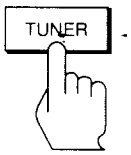
For private listening
Connect a pair of headphones to the HEADPHONES jack.
No sound is heard from the speakers

Receiving Broadcasts

You can listen to FM and AM stations.

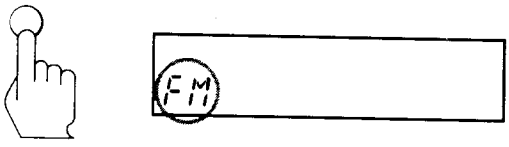


1 Press the TUNER button.



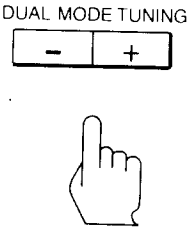
2 Press the BAND SELECT button repeatedly until the desired band appears.

BAND SELECT



3 Keep the DUAL MODE TUNING + or – button pressed for over 2 seconds so that AUTO" blinks.
The unit starts scanning frequencies and stops when it tunes into a station. Repeat this step until the desired station is tuned in.

DUAL MODE TUNING



For receiving FM stations in stereo
Press the ST/MUTE button as many times as "MUTING" appears.

If you cannot tune in a desired station
A station with a weak signal may be skipped. In this case, tune in the station manually.

- Press the DUAL MODE TUNING + or – button again to stop scanning.
- Press the DUAL MODE TUNING + or – button repeatedly and tune in the exact frequency.

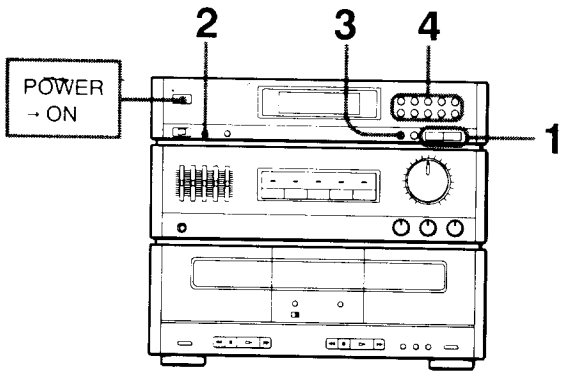
When an FM stereo program is noisy or hard to receive
Press the ST/MUTE button so that "MUTING" disappears from the display. There will be no stereo effect, but the reception will be improved. Press it again to restore the stereo effect.

The "TUNED" indication appears
When a station of sufficient signal strength is tuned in.

The "STEREO" indication appears
When an FM stereo program of sufficient signal strength is tuned in.

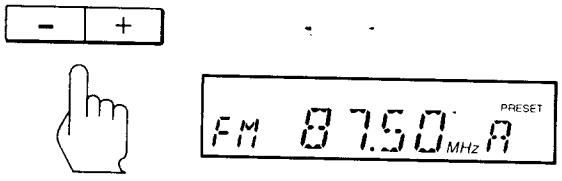
You can store station frequencies in the unit's memory for quick recall later on. Up to 30 frequencies in any band can be stored by specifying a code for each frequency. The code is a combination of a letter – A, B or C – and a number – 0 to 9: A-1, A-2, ..., A-9, A-0, B-1, ..., C-1, ..., C-0.

Storing Stations



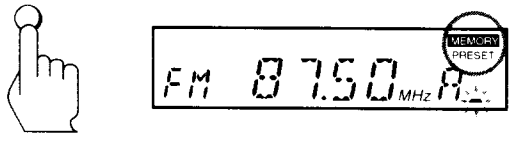
1 **Press the DUAL MODE TUNING + or – button to tune in the desired station.**

DUAL MODE TUNING



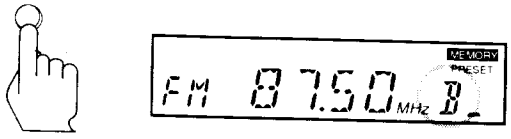
2 **Press the MEMORY button. "MEMORY" appears and "–" starts blinking.**

MEMORY

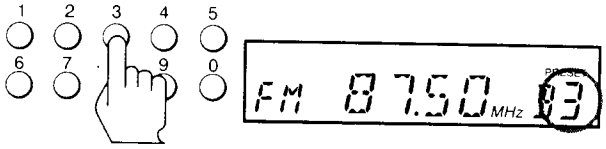


3 **Press the SHIFT button to select a letter (A, B or C).**

SHIFT



4 **Press a numeric button to select a number (0 – 9).**
A code is specified and the setting of the ST/MUTE button is also stored.



If you cannot store a station successfully
Be sure to press the buttons for the code while the "MEMORY" indication is displayed. If the indication has gone off, press the MEMORY button again.

To erase a stored station
Storing a new station on a used code erases the previously stored one.

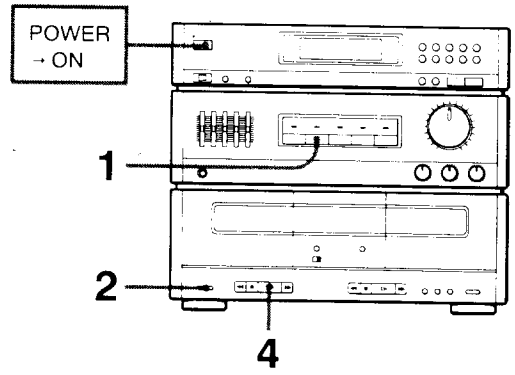
Tuning into a Stored Station Directly

Press the SHIFT button and the numeric button to specify the code for the desired station.

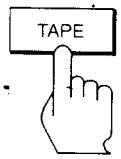
Playing Back Tapes

You can use tapes of type I and II for playback. The tape type is determined automatically.

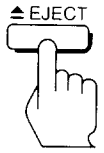
Playing Deck A or B



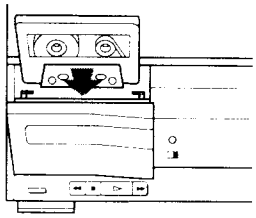
1 **Press the TAPE button**



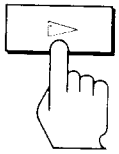
2 **Press the ⏏ EJECT button.**



3 **Insert a recorded tape.**



4 **Press the ▶ button.**
Playback starts.



When the tape is played to the end, the deck stops.

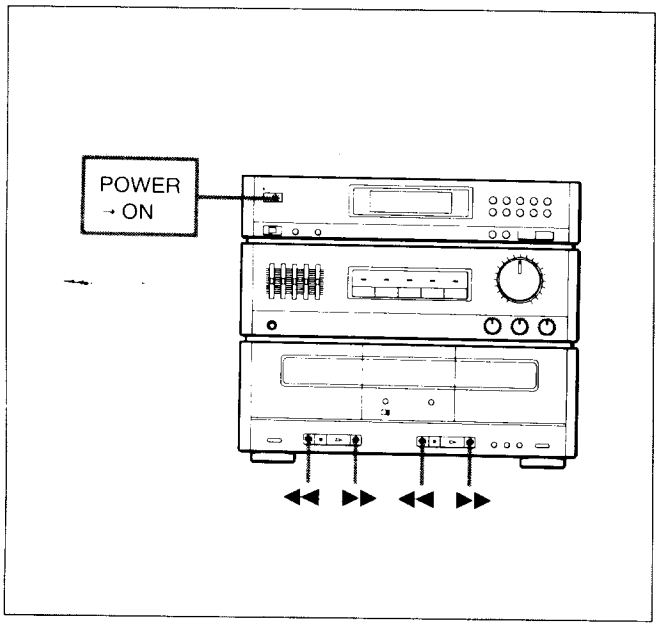
To stop during playback, press the ■ button.
To fast forward or rewind, press the ▶▶ or ◀◀ button.
To pause, press the PAUSE ⏸ button. To resume, press the PAUSE ⏸ button again.

To play a tape recorded with the Dolby NR* effect.
Set the DOLBY NR switch to ON. The setting is operated on both decks. This unit is provided with DOLBY B NR system.

When both decks are set to play mode
Only the sound from deck A will be heard.

* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY"and the double-D symbol ⊡⊡ are trademarks of Dobly Laboratories Licensing Corporation.

Locating the Beginning of a Selection – Automatic Music Sensor (AMS)



During playback, press the ◀◀ or ▶▶ button referring to the following table.

Desired selection	
Next selection	Selection being played
▶▶	◀◀

The PLAY indicator blinks while the AMS searches for the beginning of the selection.
After locating the beginning of the selection, playback will start automatically.

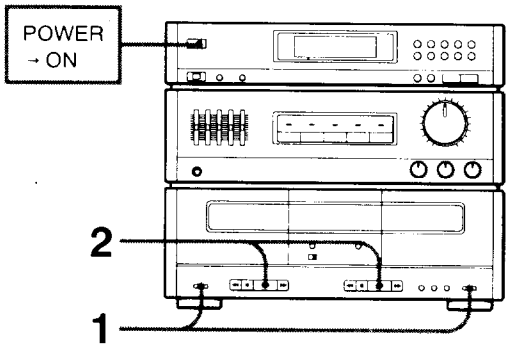
What is the AMS?
The AMS detects the blank space between selections and locates the beginning of a selection during playback. To ensure correct operation of the AMS, there must be a blank of four seconds or longer between selections.

The AMS does not function on both decks simultaneously
- The AMS button is activated for the deck whose ▶▶ or ◀◀ button is pressed first.
- If the AMS is activated for deck B during playback on deck A, deck B first winds to the beginning of the selection and stops.

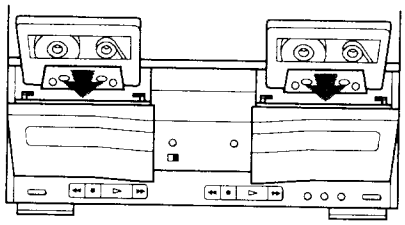
The AMS may not operate
- If there is noise in the space between selections.
- If the space is less than four seconds long.

The AMS may not operate
- a long pause in the music
- a passage of low frequencies or very low volume
- a gradual increase or decrease in volume

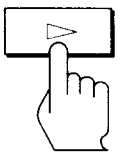
Playing from Deck to Deck – Relay Play



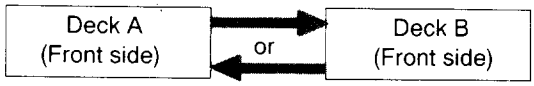
1 Insert tapes into deck A and B.



2 Press the ▶ button on either deck A or B.



Relay play follows the sequence below.



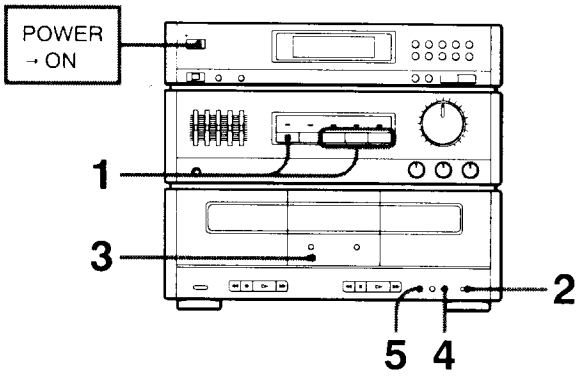
Starting Play Automatically after Rewinding

To rewind to the beginning of the front side and start playing
Press both the ◀◀ and ▶ buttons.

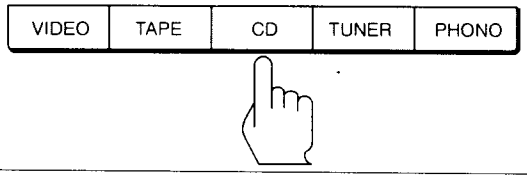
Recording on Tapes

You can use tape type I and II for recording. The tape type is determined automatically.

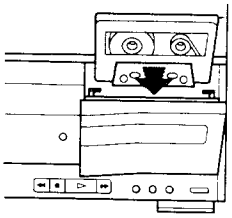
Recording a Tape



1 **Select a source (except TAPE) with the function selectors.**
You can also select the audio sources of equipment connected to the VIDEO jacks.



2 **Insert a blank tape into deck B.**



3 **Set the DOLBY NR switch to ON or OFF.**

The Dolby NR (noise reduction) system reduces tape hiss noise in low-level, high-frequency signals by boosting the signals during recording and then lowering them during playback.

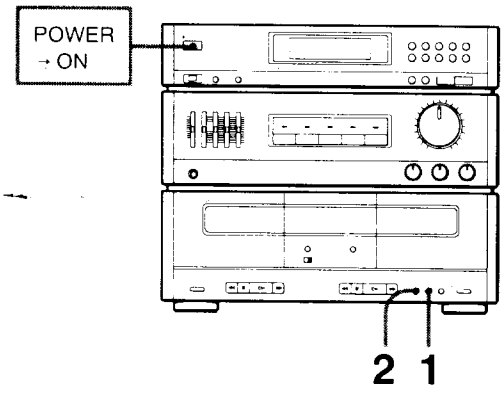
4 **Press the REC ● button.**
The deck enters recording pause mode.

5 **Press the PAUSE II button and start the selected source.**
Recording starts.

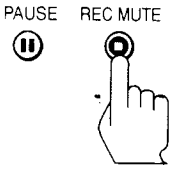
When the tape is recorded to the end, the deck stops.
To stop during recording, press the ■ button.

If you try to record on a protected tape.
The REC indicator will not light.

Inserting a Blank Space in the Recording

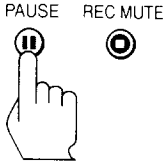


1 During recording, press the REC MUTE ○ button at the point where the blank space is to be inserted.



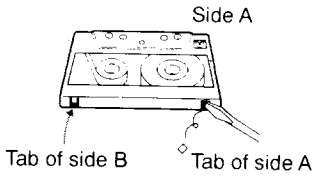
- To insert a 4-second blank
  Press the REC MUTE ○ button and release immediately. The REC indicator blinks and the tape runs without recording. After 4 seconds, the tape pauses.
- To insert a longer blank
  Keep the REC MUTE ○ button pressed as long as needed. The REC indicator will blink faster after 4 seconds. When the REC MUTE ○ button is released, the tape pauses.

2 Press the PAUSE ❚❚ button to resume recording.

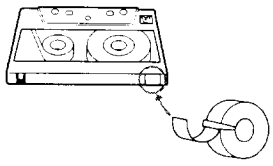


Protecting your Recording

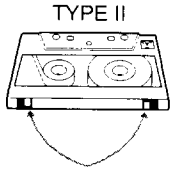
Break off the tab of the side to be protected. For side A, break off the right-hand tab facing the side A up.
This prevents further recording on that side.



To record on a protected tape, cover the opening with plastic tape.

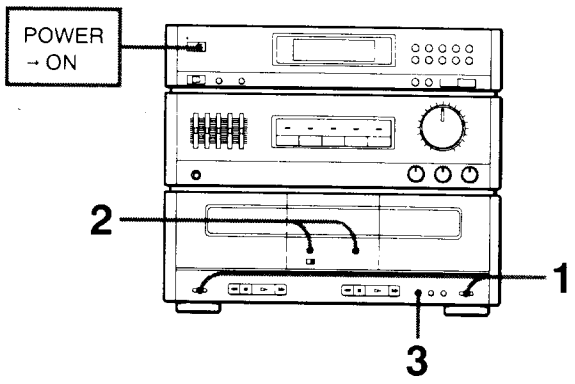


When using type II (CrO_2) tape, take care not to cover the slots used for tape type detection.

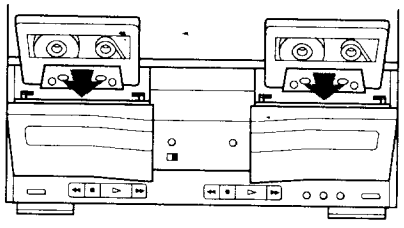


Dubbing Tapes

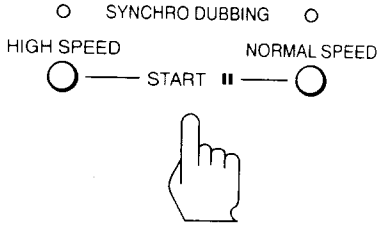
You can dub a tape in deck A onto a tape in deck B. You can choose from between two speeds: normal speed which allows editing and high speed for dubbing whole tapes quickly without editing.



1 **Insert a recorded tape into deck A and a blank tape into deck B.**



2 **Select dubbing speed (NORMAL SPEED or HIGH SPEED) with the SYNCHRO DUBBING buttons.**



3 **Press the PAUSE II button.**
Dubbing starts.

To stop dubbing, press the ■ button on deck B.

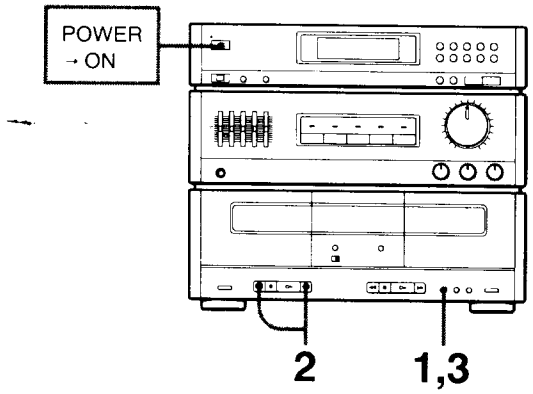
If the SYNCHRO DUBBING indicator blinks three times
The tab(s) of the cassette in the deck B has (have) been removed. To dub onto that cassette, cover the slot(s) with plastic tape.

You need not designate the Dolby NR system
The tape in deck B is recorded with the same recording level and Dolby NR system as the original tape in deck A.

You can listen to other program sources during dubbing
Select the program source with the function selectors.

Dubbing Only Desired Selections

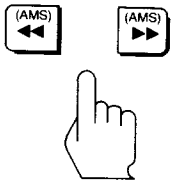
You can use this feature only during normal speed dubbing.



1 Press the PAUSE II button on deck B at the beginning of undesired selection.

Deck B enters recording pause mode.

2 Skip the selection on deck A.



AMS functions on deck A. When the selection is skipped, deck A stops.

3 Press the PAUSE II button to restart dubbing.

Maintenance

Keeping your system in good condition will allow you to enjoy good sound.

Cleaning the Cabinet

Use a soft cloth lightly moistened with a mild detergent solution.

Demagnetizing the Heads

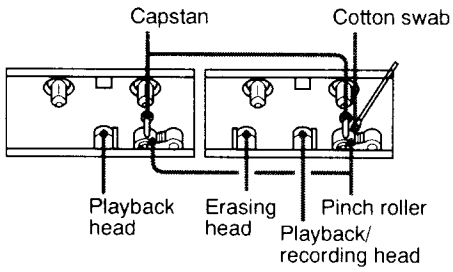
Remove magnetism built up on the heads after every 20 to 30 hours of use.
Turn off the power before demagnetizing the heads. Use any commercially available demagnetizer.

Cleaning Heads and Tape Path

Clean after every 10 hours of use and before recording.

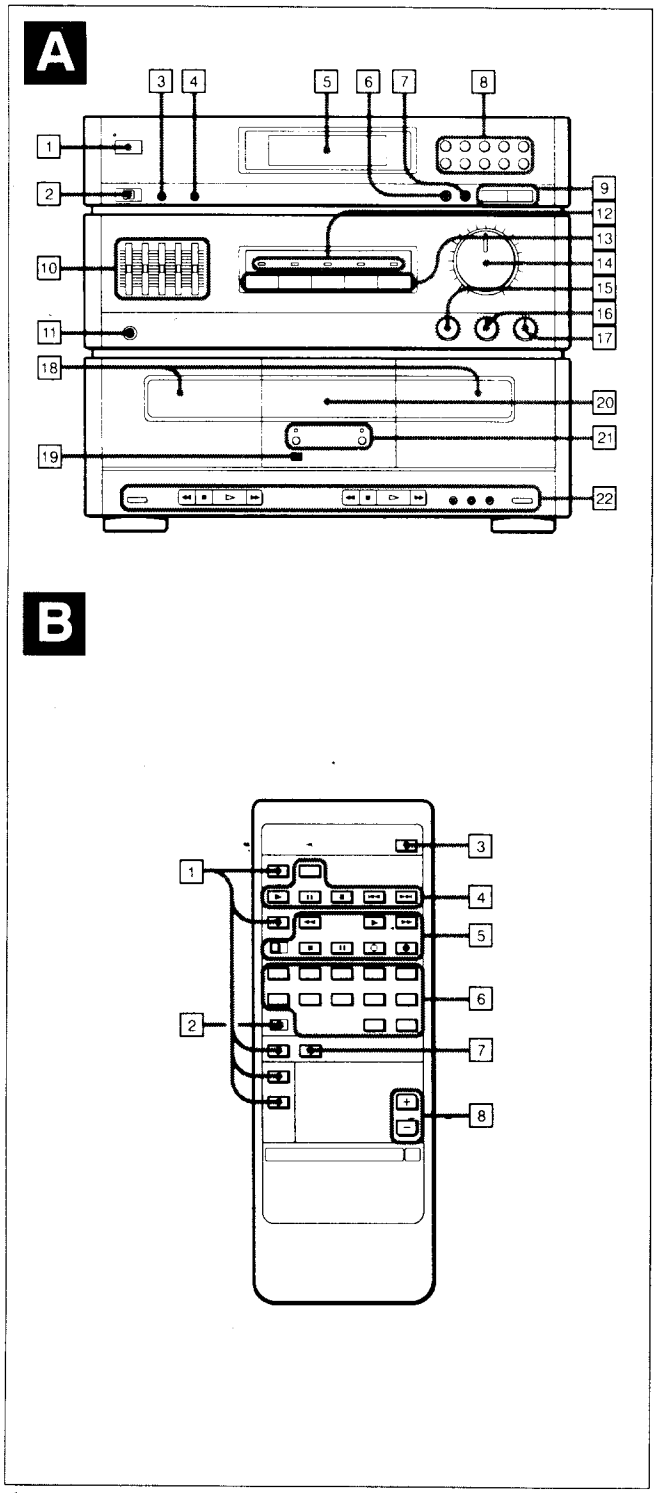
1 **Press the ⏏ EJECT button to open the cassette holder.**
2 **Moisten a cotton swab slightly with cleaning fluid or alcohol.**
3 **Wipe heads, pinch rollers and capstans.**

Do not insert a cassette until cleaned areas are completely dry.



Location of Controls

Refer to the pages indicated in parentheses for details.



Stereo Deck Receiver HST-D107R A

Tuner section

1 POWER button (page 6)
2 Remote sensor
3 MEMORY button (page 9)
4 ST/MUTE button (page 8)
5 Display window
6 SHIFT button (page 9)
7 BAND SELECT button (page 8)
8 Numeric buttons (page 9)
9 DUAL MODE TUNING +/– buttons (page 8)

Amplifier section

10 5 BAND GRAPHIC EQUALIZER controls (page 7)
11 HEADPHONES jack (page 7)
12 FUNCTION INDICATOR
13 Function selectors
14 VOL (volume) control (page 6)
15 SURROUND control (page 7)
16 DBFB control (page 7)
17 BALANCE control (page 7)

Cassette deck section

18 Cassette holders
19 DOLBY NR switch (pages 10,12)
20 Tape operating indicators
21 SYNCHRO DUBBING (HIGH SPEED/NORMAL SPEED) buttons and indicators (page 14)
22 Tape operating buttons
▶ (play) button, ■ (stop) button, ▶▶ (fast forward and AMS*) button, ◀◀ (rewind and AMS*) button, ⏏ EJECT button, PAUSE II button (only for deck B), REC ● button (only for deck B), REC MUTE O button (only for deck B)

Remote commander RM-S170 B

1 Function selectors
2 CD /TUNER selector: Function selector for numeric buttons
3 POWER button (page 6)
4 CD operating buttons
5 Tape operating buttons
Deck A/B selector, ▶ (play) button, ■ (stop) button, ▶▶ (fast forward and AMS*) button, ◀◀ (rewind and AMS*) button, II (pause) button (only for deck B), ● (recording) button (only for deck B), O (recording mute) button (only for deck B)
6 Tuner operating buttons and numeric buttons for CD player
With this remote commander, you cannot choose a number greater than 12.
7 SHIFT button (page 9)
8 VOLUME +/– button (page 6)

* AMS is the abbreviation of Automatic Music Sensor.

Specifications

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

with 6 ohm loads both channel driven, from 40 - 20,000 Hz; rated 20 watts per channel minimum RMS power, with no more than 0.5% total harmonic distortion from 250 miliwatts to rated output.

Tuner

System	FM stereo
	FM/AM superheterodyne tuner
FM tuner section	
Tuning range	87.5 to 108 MHz
Antenna	300 ohms balanced
	75 ohms unbalanced
Intermediate frequency	10.7 MHz
AM tuner section	
Tuning range	530 to 1,710 kHz
Antenna	AM loop antenna
	External antenna terminal
Intermediate frequency	450 kHz

Amplifier

Input	Jack type	Sensitivity	Impedance
CD	Phono	300 mV	47 kohms
VIDEO	Phono	300 mV	47 kohms
PHONO	Phono	3 mV	47 kohms

Output	Jack type	Impedance
HEADPHONES	Stereo phone	Accepts headphones of 8 ohms or more

Frequency response CD: 15 Hz to 50 kHz $\pm {}^{0}_{3}$dB

Cassette deck

Recording system	4-track 2-channel stereo
Frequency response	DOLBY NR OFF
	With Type II cassette (Sony UX-S)
	40 Hz to 14 kHz (±3 dB)
	With Type I cassette (Sony HF-S)
	40 Hz to 13 kHz (±3 dB)
Wow and flutter	0.1% (WRMS)

General

Power requirements	120 V AC, 60 Hz
Power consumption	130 W
Weight	Approx. 8 kg (17 lb 10 oz)
Dimensions	Approx. 355 x 290 x 325 mm (14 x 11 1/2 x 12 7/8 inches) (w/h/d, including projections)

Speaker systems

Speaker system	3-way
Weight	Approx. 4.3 kg (9 lb 9 oz.), per speaker
Dimensions	Approx. 260 x 441 x 175 mm (10 1/4 x 17 3/8 x 7 inches) (w/h/d)

Accessaries supplied

Remote commander RM-S170	1
Batteries Sony SUM-3 (NS)	2
FM wire antenna	1
AM loop antenna	1

Design and specifications are subject to change without notice.

Troubleshooting Guide

Before going through the check list below, first refer back to the connections and operating procedures.

Should any problem persist after you have made these checks, consult your nearest Sony service facility.

General

Symptom	Cause	Remedy
No power	AC power cord is not connected securely.	Connect the AC power cord securely.
No sound	The VOLUME control is not turned up.	Turn up the volume.
Reversed left and right sound	Wrong connection	Connect the speakers correctly.
Severe hum and noise	Wrong connection	Connect the speakers correctly.
	Loose connections	Make connections securely.
	The unit is located near TV/VCR.	Move TV/VCR away from the unit.

Tuner

Symptom	Cause	Remedy
The"TUNED"or"STEREO"indication blinks.	Antenna is not aimed in the right direction.	Adjust the location and direction of the antenna.
	Received signals are weak.	Connect to an external antenna if the indication still blinks even after adjusting the antenna.
Severe hum or noise	Antenna is not aimed in the right direction.	Adjust the location and direction of the antenna.
	Received signals are weak.	Connect to an external antenna if hum or noise still interferes with reception.

Cassette deck

Symptom	Cause	Remedy
You cannot record on a tape.	The tab has been removed from the cassette.	Cover it with a piece of adhesive tape.
You cannot dub tapes.	The tab of the cassette in deck B has been removed.	Cover it with a piece of adhesive tape.
Unbalanced tone in higher frequencies	The DOLBY NR switch is not in the correct position.	Set the DOLBY NR switch to ON or OFF as was set for recording.
Unclear recording or playback	Dirty head	Clean and demagnetize the recording/ playback heads.
Excessive wow or flutter, or sound dropout	Dirty capstans and pinch rollers	Clean the capstan and pinch roller.
Incomplete erasure.	Magnetized erasing head	Demagnetize the erasing head.

Remote commander

Symptom	Cause	Remedy
The remote commander does not function.	The batteries are run down.	Replace both batteries.
	The remote commander is not pointed at the remote sensor.	Point the remote commander at the sensor.
	There is an obstacle between the remote commander and the unit.	Remove the obstacle.
	The remote commander is too far from the unit.	Move closer.

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